

**SYSTEM AND METHOD FOR A MULTICAST NETWORK
MESSAGING SERVICE**

ABSTRACT OF THE INVENTION

A method for the multicast distribution of a message is provided. A first real
5 machine multicasts the message through a network of message processing machines to
one or more message receiving machines, wherein the network is organized into two or
more cells including machines, and wherein one or more links between cells comprise
link bundles. The method includes selecting a spanning tree rooted in the cell including
the first real machine, and comprised of the cells and the link bundles. The method
10 determines one or more cells for receiving the message based on the selected spanning
tree and the location of the receiving machines, and selects one or more routes from
among the machines and links within the cells and link bundles to a next cell. The
method further routes the message to the receiving cells in the spanning tree, and
delivering the message to the receiving machines within the receiving cells.